

**Notice of Allowability**

Application No.

09/826,074

Examiner

Beniyam Menberu

Applicant(s)

WANG, MINGJIE

Art Unit

2625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to November 27, 2006.
2. ☒ The allowed claim(s) is/are 1-6, 8-13, 15-20, 22-27, 29 and 30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with J. Joel Justiss on February 16, 2007 and February 19, 2007.

The application has been amended as follows:

- Claim 1 has been amended as follows:

A system for recovering primary channel operation in a facsimile receiver, comprising:

a signal receiver that receives a signal containing first and second points located at first and second angles; and

angle determination circuitry that determines one of said first and second angles is an offset angle by which said signal has been rotated and refines said offset angle based on a subsequent signal.

- Claim 7 is cancelled.
- Claim 8 has been amended as follows:

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A method of recovering primary channel operation in a facsimile receiver, comprising:

examining first and second angles of first and second points of a signal; and

determining one of said first and second angles is an offset angle by which said signal has been rotated; and

refining said offset angle based on a subsequent signal.

- Claim 14 is cancelled.
- Claim 15 has been amended as follows:

A facsimile machine, comprising:

image formation circuitry;

telecommunications circuitry, including a facsimile receiver, coupled to said image formation circuitry; and

a system, associated with said facsimile receiver, for recovering primary channel operation, including:

a signal receiver that receives a signal containing first and second points located at first and second angles, and

angle determination circuitry that determines one of said first and second angles is an offset angle by which said signal has been rotated and refines said offset angle based on a subsequent signal.

- Claim 21 is cancelled.
- Claim 22 is amended as follows:

An apparatus that determines the difference between a received constellation of signals and an expected constellation of signals, comprising:

a signal receiver that receives a constellation of signals containing first and second points located at first and second angles, respectively; and

angle determination circuitry that determines one of said first and second angles is an offset angle by which the first and second points have been rotated from an expected constellation of signals and refines said offset angle based on a subsequent signal.

- Claim 28 is cancelled.

### ***Reasons for Allowance***

1. Claims 1-6, 8-13, 15-20, 22-27, and 29-30 are allowed.
2. The following is an examiner's statement of reasons for allowance:

In addition to the teachings of the claims 1, 8, 15, and 22 as a whole, the closest prior art of record failed to teach or suggest;

"angle determination circuitry that determines one of first and second angles is an offset angle by which a signal has been rotated and refines said offset angle based on a subsequent signal".

Therefore, claims 2-6, 9-13, 16-20, 23-27, and 29-30 are allowable for depending on claims 1, 8, 15, and 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Other Prior Art Cited**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 3993862 to Karr discloses facsimile device.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>.


Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Patent Examiner**

Beniyam Menberu

BM

02/20/2007

  
AUNG S. MOE 2/20/07  
SUPERVISORY PATENT EXAMINER